

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A monoclonal antibody suitable for monitoring the activity of systems involving a serpin protein C inhibitor, said monoclonal antibody having specific affinity for both

- (i) a complex between a serine proteinase and a serine proteinase ~~an~~ inhibitor ~~thereof~~, and
- (ii) a cleaved and uncomplexed form of said serine proteinase inhibitor,

while having no specific affinity for said inhibitor in its uncleaved and active ~~uncomplexed form of said serine proteinase inhibitor; or a derivative thereof having the same biological activity.~~ wherein the serine protease inhibitor is a serpin.

2. (Currently Amended) A monoclonal antibody according to claim 1, wherein said monoclonal antibody is obtainable by immunisation of an animal with a mixture of

- (i) a complex between a serine proteinase and a serine proteinase ~~an~~ inhibitor ~~thereof~~, and
- (ii) a cleaved and uncomplexed form of said serine proteinase inhibitor,

followed by screening for and isolation of said monoclonal antibody, wherein the serine proteinase inhibitor is a serpin.

3. (Original) A monoclonal antibody according to claim 2, wherein said animal is a mouse, preferably a Balb/c mouse.

4. (Previously Presented) A monoclonal antibody according to claim 1, wherein said serine proteinase is selected from the group consisting of activated protein C (APC), thrombin, coagulation factor X_a, trypsin, chymotrypsin, urokinase plasminogen activator (uPA), tissue type plasminogen activator (tPA), plasma kallikrein, factor XI_a, HGKI and prostatic specific antigen (PSA).

5. (Previously Presented) A monoclonal antibody according to claim 1, wherein said inhibitor is protein C inhibitor (PCI) or α₁-antitrypsin.

6. (Currently Amended) A method for preparation of a monoclonal antibody as defined in claim 1, wherein an animal is immunised with a mixture of

- i) a complex between a serine proteinase and a serine proteinase an inhibitor thereof, and
- ii) a cleaved form of said serine proteinase inhibitor, followed by screening for and isolation of said monoclonal antibody, wherein the serine proteinase inhibitor is a serpin.

7. (Original) A method for preparation of a monoclonal antibody according to claim 6, wherein said animal is a mouse, preferably a Balb/c mouse.

8. (Previously Presented) A method for monitoring the activity of systems involving protein C inhibitor, wherein a monoclonal antibody as defined in claim 1 is used in an immunoassay.

9. (Original) A method according to claim 8, wherein said immunoassay comprises a sandwich-type immunoassay.

10. (Original) A method according to claim 9, wherein said sandwich-type immunoassay is a technique comprising a tracer agent and said monoclonal antibody bound to a surface.

11. (Original) A method according to claim 10, wherein said tracer agent comprises an antibody having specific affinity for said serine proteinase or an epitope shared by said serine proteinase and said inhibitor.

12. (Previously Presented) A method according to claim 11, wherein said tracer agent is conjugated to a enzyme and/or labelled with a tracing substance.

13. (Original) A method according to claim 12, wherein said enzyme is an alkaline phosphatase, horse radish peroxidase or a β -galactosidase.

14. (Previously Presented) A method according to claim 13, wherein said tracing substance is ^{125}I , ^{131}I , Eu^{3+} or Sm^{3+} .

15. (Previously Presented) A method for diagnosis of venous thrombosis, arterial thrombosis, embolism, coronary infarction, disseminated intravascular coagulation or disorders involving lupus anticoagulants, wherein a monoclonal antibody according to claim 1 is utilised.

16. (Previously Presented) A method for diagnosis of venous thrombosis, arterial thrombosis, embolism, coronary infarction, disseminated intravascular coagulation or disorders involving lupus anticoagulants, wherein a method according to claim 8 is utilised.

17. (Cancelled)

18. (Cancelled)

19. (Previously Presented) A kit for qualitative or quantitative determination of the activity of systems involving protein C inhibitor comprising a monoclonal antibody according to claim 1.

20. (Previously Presented) A monoclonal antibody according to claim 2, wherein said serine proteinase is selected from the group consisting of activated protein C (APC), thrombin, coagulation factor X_a , trypsin, chymotrypsin, urokinase

plasminogen activator (uPA), tissue type plasminogen activator (tPA), plasma kallikrein, factor XI_a, HGKI and prostatic specific antigen (PSA).

21. (Previously Presented) A monoclonal antibody according to claim 2, wherein said inhibitor is protein C inhibitor (PCI) or α₁-antitrypsin.

22. (Currently Amended) A method for preparation of a monoclonal antibody as defined in claim 2, wherein an animal is immunised with a mixture of

- i) a complex between a serine proteinase and a serine proteinase an inhibitor thereof, and
- ii) a cleaved form of said serine proteinase inhibitor, followed by screening for and isolation of said monoclonal antibody, wherein the serine proteinase inhibitor is a serpin.

23. (Previously Presented) A method for monitoring the activity of systems involving protein C inhibitor, wherein a monoclonal antibody as defined in claim 2 is used in an immunoassay.

24. (Previously Presented) A method for diagnosis of venous thrombosis, arterial thrombosis, embolism, coronary infarction, disseminated intravascular coagulation or disorders involving lupus anticoagulants, wherein a monoclonal antibody according to claim 2 is utilised.

25. (Previously Presented) A method for diagnosis of venous thrombosis, arterial thrombosis, embolism, coronary infarction, disseminated intravascular coagulation or disorders involving lupus anticoagulants, wherein a method according to claim 2 is utilised.

26. (Previously Presented) A kit for qualitative or quantitative determination of the activity of systems involving protein C inhibitor comprising a monoclonal antibody according to claim 2.